

National Emission Standard for Hazardous Air Pollutant for Area Sources: Industrial, Commercial and Institutional Boilers

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To Protect and Enhance Kentucky's Environment



Outline of Presentation

- Brief timeline and the current status of the regulation
- Who is subject to the regulation?
- Who is exempt from the regulation?
- What deadlines do sources need to meet and when?



Promulgation Timeline

NESHAP for Area Sources: Industrial, Commercial and Institutional Boilers, 40 CFR Part 63 Subpart JJJJJJ (6J)

- Original proposal – June 4, 2010
- Final rule – March 21, 2011
- Notice of Reconsideration – March 21, 2011
- Proposed amendment to final rule – December 23, 2011
- Amendments to final rule – February 1, 2013



Current Status

EPA received three petitions for reconsideration of the February 1, 2013 final rule amendments

On August 5, 2013, EPA issued letters to petitioners granting reconsideration on five specific issues raised in the petitions:

- Definitions of startup and shutdown periods;
- Alternative particulate matter standard for new oil-fired boilers that combust low-sulfur oil;
- Establishment of a subcategory and separate requirements for limited-use boilers;
- Establishment of a provision that eliminates further performance testing for PM for certain boilers based on their initial compliance test; and
- Establishment of a provision that eliminates further fuel sampling for mercury for certain coal-fired boilers based on their initial compliance demonstration.



Who is Subject?

- Applies to an area source facility which emits or has potential to emit less than 10 tons per year (tpy) of any single HAP and less than 25 tpy of any combination of HAP.
- Expected to apply to boilers located primarily at commercial facilities (e.g., hotels, office buildings, restaurants) and institutional facilities (e.g., schools, universities, hospitals, prisons), as well as industrial facilities.
- Rule **applies to coal, biomass, and oil-fired boilers**. Rule does **NOT** apply to boilers that are gas-fired, as defined.



Boiler Subcategories

- **Oil subcategory**

Any boiler that burns any liquid fuel and is not in biomass or coal subcategories. Gas-fired boilers that burn liquid fuel during periods of gas curtailment, gas supply interruption, startups, or periodic testing up to 48 hours per calendar year not included

- **Coal subcategory**

Any boiler that burns any solid fossil fuel and no more than 15 percent biomass on an annual heat input basis

- **Biomass subcategory**

Any boiler that burns any biomass and is not and not in the coal subcategory

- **Seasonal, Oil-fired < 5 MMBtu/hr, Limited-use, Boilers with oxygen 10 trim systems that maintain optimum air-to-fuel ratio**



Who is Exempt?

- **Hot water heaters** with a capacity of no more than 120 gallons combusting oil, gas or biomass. Gas, oil, and biomass **hot water boilers (e.g., not generating steam) rated at less than 1.6 million Btu per hour are included in this and not covered by the rule**
- **Gas-fired boilers** that burn gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply interruptions, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.



Exemption Cont'd

- **Residential boilers** intended primarily for heat or power for a residential unit of up to four families, or a single unit residence that has been converted or subdivided into apartments or condos
- **Temporary boilers** used temporarily in place of another boiler while that unit is being replaced or repaired, generally over an operational period of less than 12 months, unless an extension approved
- **Electric boilers**
 - Boilers regulated under another Part 63 rule



Exemption Cont'd

- **Boilers burning waste** and covered under incinerator rules
 - Any boiler specifically listed as an affected source in another standard(s) established under section 129 of the Clean Air Act.
 - A boiler required to have a permit under section 3005 of the Solid Waste Disposal Act or covered by subpart EEE of this part (e.g., hazardous waste boilers).
- **Research and development boilers**
- **Process heaters**
- **Boilers used as a control device** to comply with another subpart of part 60, 61, 63, or 65
 - provided that at least 50 percent of the heat input to the boiler is provided by the gas stream that is regulated under another subpart.
- **Electric Utility Steam Generating Units (EGUs)** covered by Part 63 Subpart UUUUU



Requirements for Existing Boilers

Subcategory			Summary of Requirement
Existing large area source boilers ¹	i.e., commenced construction or reconstruction of the boiler on or <u>before June 4, 2010</u> ; greater than or equal to 10 MMBtu/hr	Gas (all types)	<ul style="list-style-type: none"> No requirements (not covered by the rule)
		Coal (excluding limited-use boilers)	<ul style="list-style-type: none"> Numeric emission limits for mercury (Hg) and carbon monoxide (CO) One-time energy assessment
		Biomass and Oil	<ul style="list-style-type: none"> Tune-up every other year or every 5 years One-time energy assessment No numeric emission limits
		Limited-use coal	<ul style="list-style-type: none"> Tune-up every 5 years No energy assessment No numeric emission limits
Existing small area source boilers ¹	i.e., commenced construction or reconstruction of the boiler on or <u>before June 4, 2010</u> ; less than 10 MMBtu/hr	Gas (all types)	<ul style="list-style-type: none"> No requirements (not covered by the rule)
		Coal, Biomass and Oil	<ul style="list-style-type: none"> Tune-up every other year or every 5 years No numeric emission limits



Requirements for New Boilers

Subcategory			Summary of Requirement
New large area source boilers ²	i.e., commenced construction or reconstruction of the boiler <u>after June 4, 2010</u> ; greater than or equal to 10 MMBtu/hr	Gas (all types)	<ul style="list-style-type: none"> No requirements (not covered by rule)
		Coal (excluding limited-use boilers)	<ul style="list-style-type: none"> Numeric emission limits for Hg, CO, and particulate matter (PM)
		Biomass and Oil (excluding limited-use and seasonal boilers)	<ul style="list-style-type: none"> Numeric emission limit for PM³ Tune-up every other year or every 5 years
		Limited-use coal	<ul style="list-style-type: none"> Tune-up every 5 years No numeric emission limits
		Limited-use and seasonal biomass and oil	<ul style="list-style-type: none"> Tune-up every 5 years No numeric emission limits
New small area source boilers ²	i.e., commenced construction or reconstruction of the boiler <u>after June 4, 2010</u> ; less than 10 MMBtu/hr	Gas (all types)	<ul style="list-style-type: none"> No requirements (not covered by the rule)
		Coal, Biomass and Oil	<ul style="list-style-type: none"> Tune-up every other year or every 5 years No numeric emission limits



Notifications and Deadlines

- **Initial Notifications due by January 20, 2014** or within 120 days after the source becomes subject to standard
- Complete initial tune-up, compliance with emission limits and energy assessment by **March 21, 2014** (existing sources). New sources must comply by May 20, 2011, or upon startup, whichever is later.
- **Notification of Compliance Status (NOCS)** due no later than 120 days after the applicable compliance date, unless you must conduct a performance stack test. If so, NOCS due within 60 days of completing the performance stack test.
 - e.g., **NOCS following the energy assessment and tune-up is due no later than July 19, 2014** for existing sources



Notifications and Deadlines Cont'd

- **Notification of Intent to Conduct Performance Test** due at least 60 days before the performance stack test
- **Compliance Certification Reports** must be prepared, by March 1 of each year, and submitted to the delegated authority upon request for the previous calendar year.
 - must submit the report by March 15 if you had any deviations from applicable requirements.
 - For boilers subject only to a requirement to conduct a tune-up and not subject to emission limits or operating limits, you are only required to prepare a **Biennial or Five Year Compliance Report**



Notifications and Deadlines Cont'd

Fuel switch/changes notification – If you have switched fuels, or made a physical change to the boiler, or have taken a permit limit results in you being in a different subcategory, or becoming subject to Subpart 6J, or no longer being subject to Subpart 6J due to a switch to 100% natural gas, **you must provide notice within 30 days** of the fuel switch, the physical change or the permit issuance



Notifications and Deadlines Cont'd

- **Electronic Reporting:** Rule requires electronic reporting of the Notification of Compliance Status (NOCS), test results, and continuous emissions monitoring system (CEMS) relative accuracy test audit (RATA) results, using the Compliance and Emissions Data Reporting Interface (CEDRI) through EPA's Central Data Exchange (www.epa.gov/cdx).
- **NOCS report required to be submitted electronically**, once EPA completes the reporting template. EPA is accepting paper NOCS only until the electronic reporting template is ready.
- **Test results and RATA results are required electronically** for the test methods listed on EPA's Electronic Reporting Tool (ERT) website (www.epa.gov/ttn/chief/ert/index.html). For test methods or RATA pollutants not listed on the website, paper submissions are required.
- **All other reports and notifications are required as paper submissions** under the rule.



Questions?



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